

AB-308U

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IN THE SPECIFICATION:

Please amend the following paragraphs as indicated:

[0031] The inventors believe that the sensation of angina pectoris involves the activation of afferent nerve pathway(s) 100: The afferent neural messages that are interpreted by the brain as angina pectoris reach the central nervous system at least in part by traveling along visceral afferent fibers 100 that course along with cardiac sympathetic nerve fibers 101. These afferent fibers 100 have their cell bodies in the dorsal root ganglia 108 at their respective spinal levels, T1, T2, T3, and T4, with dendrites extending from the heart to these cell bodies. Signals are thus carried via these afferent fibers 100 from the heart, to and through the first through fourth thoracic sympathetic ganglia 102 of the sympathetic trunk 105, respectively. (Note that the first thoracic sympathetic ganglion 102 ~~comprise~~ comprises a portion of the cervicothoracic ganglion 103, also known as the stellate ganglion 103.) The signals then travel along the white ramus communicans 104 and spinal nerve 106, through their respective dorsal root ganglia 108, along posterior (dorsal) root 110, and into the spinal cord. The visceral afferent signals ascend the spinal cord to the brain.

[0108] In some embodiments discussed earlier, microstimulator 150, or two or more microstimulators, is controlled via closed-loop operation. A need for and/or response to stimulation is sensed via microstimulator 150, or by an additional microstimulator (which may or may not be dedicated to the sensing function), or by another implanted or external device. If necessary, the sensed information is transmitted to microstimulator 150. In some cases, the sensing and stimulating are performed by one stimulator. In some embodiments, the stimulation parameters used by microstimulator 150 are automatically adjusted based on the sensed information. For instance, one "microstimulator" may ~~performs~~ perform the sensing, stimulation parameter adjustments, and current generating functions. Thus, the stimulation parameters may be adjusted in a closed-loop manner to provide stimulation tailored to the need for and/or response to stimulation.